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Childhood Asthma in North Carolina

by

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ABSTRACT

Objectives: Asthma is one of the most common illnesses among children, yet there is little reliable information on the number of children in North Carolina who are living with asthma. This study examines the prevalence of asthma among children on Medicaid and the rates of hospitalization for asthma among all children in the state.

Methods: Claims paid by Medicaid during state fiscal year 1997-1998 with a diagnosis of asthma or for a prescription drug used to treat asthma are examined to count the number of children ages 0-14 at the state and county level with asthma. Percentages of enrolled children with asthma are calculated, and the costs of asthma treatment are portrayed. Hospital discharge rates for the period 1995-1997, per 100,000 children ages 0-14, are presented at the state and county level.

Results: Approximately 13 percent of North Carolina children ages 0-14 on Medicaid had an indication of asthma. By age, the prevalence rates were: 17 percent for 0-4, 10 percent for 5-9, and 9 percent for 10-14. There were large variations in prevalence among counties in North Carolina. More than \$23,000,000 was paid by Medicaid during the fiscal year for asthma-related services for children ages 0-14. During 1995-1997 there was an average of more than 6,500 asthma-related hospitalizations per year among children, with a statewide rate of 436 discharges per 100,000 children ages 0-14. There were large variations in the hospital discharge rate by county of residence. In contrast to some other studies, asthma prevalence and hospitalization rates were found to be higher in rural than in urban areas of North Carolina.

Conclusions: Many children on Medicaid in North Carolina have asthma and asthma is one of the most frequent causes of hospitalization among all children in the state. State administrative databases are useful for studying asthma and other conditions among children in North Carolina. Relying on existing data systems allows quick updates of the information at the state and county level, enhancing the ability to study trends in illness and hospitalization over time.